```
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* * * * * * * * * *
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NEWS
NEWS
         JAN 02
                 STN pricing information for 2008 now available
NEWS
         JAN 16
                 CAS patent coverage enhanced to include exemplified
                 prophetic substances
                 USPATFULL, USPAT2, and USPATOLD enhanced with new
NEWS
         JAN 28
                 custom IPC display formats
                 MARPAT searching enhanced
NEWS 5
         JAN 28
NEWS 6
         JAN 28
                 USGENE now provides USPTO sequence data within 3 days
                 of publication
NEWS
         JAN 28
                 TOXCENTER enhanced with reloaded MEDLINE segment
NEWS 8
         JAN 28 MEDLINE and LMEDLINE reloaded with enhancements
NEWS 9 FEB 08
                 STN Express, Version 8.3, now available
NEWS 10 FEB 20
                 PCI now available as a replacement to DPCI
NEWS 11 FEB 25
                 IFIREF reloaded with enhancements
NEWS 12 FEB 25
                 IMSPRODUCT reloaded with enhancements
NEWS 13 FEB 29 WPINDEX/WPIDS/WPIX enhanced with ECLA and current
                 U.S. National Patent Classification
NEWS 14 MAR 31
                 IFICDB, IFIPAT, and IFIUDB enhanced with new custom
                 IPC display formats
NEWS 15 MAR 31
                 CAS REGISTRY enhanced with additional experimental
NEWS 16
         MAR 31
                 CA/CAplus and CASREACT patent number format for U.S.
                 applications updated
                 LPCI now available as a replacement to LDPCI
NEWS 17
         MAR 31
                 EMBASE, EMBAL, and LEMBASE reloaded with enhancements
         MAR 31
NEWS 19 APR 04
                STN AnaVist, Version 1, to be discontinued
NEWS EXPRESS FEBRUARY 08 CURRENT WINDOWS VERSION IS V8.3,
             AND CURRENT DISCOVER FILE IS DATED 20 FEBRUARY 2008
NEWS HOURS
              STN Operating Hours Plus Help Desk Availability
NEWS LOGIN
              Welcome Banner and News Items
NEWS IPC8
              For general information regarding STN implementation of IPC 8
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=> file req
COST IN U.S. DOLLARS
                                                 SINCE FILE
                                                                TOTAL
                                                      ENTRY
                                                              SESSION
FULL ESTIMATED COST
                                                        0.21
                                                                0.21
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                           9 APR 2008 HIGHEST RN 1013298-21-9
DICTIONARY FILE UPDATES:
                           9 APR 2008 HIGHEST RN 1013298-21-9
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  conducting SmartSELECT searches.
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http://www.cas.org/support/stngen/stndoc/properties.html
=> s coumaryl quinic acid
            74 COUMARYL
           125 QUINIC
       9355238 ACID
          8239 ACIDS
       9361176 ACID
                 (ACID OR ACIDS)
L1
             2 COUMARYL QUINIC ACID
                 (COUMARYL (W) QUINIC (W) ACID)
=> d 11
    ANSWER 1 OF 2 REGISTRY COPYRIGHT 2008 ACS on STN
L1
     928012-37-7 REGISTRY
RN
    Entered STN: 23 Mar 2007
ED
CN
     Cyclohexanecarboxylic acid, 3,4,5-trihydroxy-1-[[(2E)-3-(4-hydroxyphenyl)-
     1-oxo-2-propen-1-y1]oxy]-, (1\alpha, 3R, 4\alpha, 5R)- (CA INDEX NAME)
OTHER NAMES:
CN
    1-O-p-Coumaroylquinic acid
```

Absolute stereochemistry. Double bond geometry as shown.

1-p-Coumarylquinic acid

BEILSTEIN*, CA, CAPLUS

(*File contains numerically searchable property data)

STEREOSEARCH

53505-94-5

C16 H18 O8

STN Files:

CN

FS

DR MF

SR

LC.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3 REFERENCES IN FILE CA (1907 TO DATE)
3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> d 11 2

ANSWER 2 OF 2 REGISTRY COPYRIGHT 2008 ACS on STN 1899-30-5 REGISTRY RN ΕD Entered STN: 16 Nov 1984 Cyclohexanecarboxylic acid, 1,3,4-trihydroxy-5-[[3-(4-hydroxyphenyl)-1-oxo-2-propen-1-yl]oxy]-, (1S,3R,4R,5R)- (CA INDEX NAME) OTHER CA INDEX NAMES: Cinnamic acid, p-hydroxy-, 3-ester with 1,3,4,5-CN tetrahydroxycyclohexanecarboxylic acid (7CI, 8CI) CN Cyclohexanecarboxylic acid, 1,3,4-trihydroxy-5-[[3-(4-hydroxyphenyl)-1-oxo-2-propenyl]oxy]-, (1S, 3R, 4R, 5R)- (9CI)CN Cyclohexanecarboxylic acid, 1,3,4-trihydroxy-5-[[3-(4-hydroxyphenyl)-1-oxo-2-propenyl]oxy]-, [1S- $(1\alpha, 3\alpha, 4\alpha, 5\beta)$]-OTHER NAMES: CN 3-O-p-Coumaroylquinic acid CN 3-O-p-Coumarylquinic acid CN 3-p-Coumaroylquinic acid CN 3-p-Coumarylquinic acid FS STEREOSEARCH DR 19030-00-3, 19030-11-6 MF C16 H18 O8 AGRICOLA, BEILSTEIN*, BIOSIS, CA, CAOLD, CAPLUS, CASREACT, LC STN Files: NAPRALERT, TOXCENTER, USPAT2, USPATFULL

(*File contains numerically searchable property data)

Absolute stereochemistry. Double bond geometry unknown.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

- 181 REFERENCES IN FILE CA (1907 TO DATE)
 - 2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
- 181 REFERENCES IN FILE CAPLUS (1907 TO DATE)
- 20 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> s 1899-30-5 /rn

L2 1 1899-30-5 /RN

=> file medicine

FILE 'DRUGMONOG' ACCESS NOT AUTHORIZED

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 21.75 21.96

FULL ESTIMATED COST

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FILE 'USGENE' ENTERED AT 16:44:37 ON 10 APR 2008

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FILE 'USPATFULL' ENTERED AT 16:44:37 ON 10 APR 2008
CA INDEXING COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)
FILE 'USPATOLD' ENTERED AT 16:44:37 ON 10 APR 2008
CA INDEXING COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)
FILE 'USPAT2' ENTERED AT 16:44:37 ON 10 APR 2008
CA INDEXING COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)
=> s 12
'RN' IS NOT A VALID FIELD CODE
           244 L2
L3
=> s 13 and leukemia
            15 L3 AND LEUKEMIA
T. 4
=> dup rem 14
DUPLICATE IS NOT AVAILABLE IN 'ADISINSIGHT, ADISNEWS, DGENE, DRUGMONOG2,
IMSPRODUCT, KOSMET, NUTRACEUT, PCTGEN, PHARMAML, USGENE'.
ANSWERS FROM THESE FILES WILL BE CONSIDERED UNIQUE
PROCESSING COMPLETED FOR L4
             11 DUP REM L4 (4 DUPLICATES REMOVED)
=> d 15 bib abs 1-11
L5
     ANSWER 1 OF 11 USPATFULL on STN
       2007:210325 USPATFULL
AN
ΤI
       Herbal composition for treating CD33+ acute and chronic myeloid
       leukemia and a method thereof
IN
       Bandyopadhyay, Santu, Calcutta, INDIA
       Roy, Keshab Chandra, Calcutta, INDIA
       Ray, Mitali, Calcutta, INDIA
       Banerjee, Goutam, Calcutta, INDIA
       Pal, Bikash Chandra, Calcutta, INDIA
       Biswas, Tanusree, Calcutta, INDIA
       Bhattacharya, Samir, Calcutta, INDIA
       COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH, NEW DELHI, INDIA
PA
       (non-U.S. corporation)
       US 2007184131
                               20070809
PΤ
                           A1
ΑI
       US 2007-730433
                           A1 20070402 (11)
RLI
       Division of Ser. No. US 2004-960064, filed on 8 Oct 2004, PENDING
       Division of Ser. No. US 2002-207039, filed on 30 Jul 2002, GRANTED, Pat.
       No. US 6852344 Continuation-in-part of Ser. No. US 2001-772003, filed on
       30 Jan 2001, ABANDONED
       WO 2000-IN118
PRAI
                           20001204
```

US 2002-384163P 20020531 (60)

DT Utility

FS APPLICATION

LREP FITZPATRICK CELLA HARPER & SCINTO, 30 ROCKEFELLER PLAZA, NEW YORK, NY,

10112, US

CLMN Number of Claims: 31 ECL Exemplary Claim: 1 DRWN 8 Drawing Page(s)

LN.CNT 914

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method of treating CD33+ acute and chronic myeloid leukemia in animals including humans, using fraction nos. 1 and 9 obtained from water:methanol fraction by column chromatography, with ratio of water and methanol ranging between 1:5 to 5:1, wherein said water:methanol fraction is obtained from the polar extract of Piper betel by HPLC, with retention time of 3.6 and 24.0 minutes respectively, with said fractions used both individually, and in combination.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 2 OF 11 USPATFULL on STN

AN 2007:184711 USPATFULL

TI Pharmaceutical composition useful for treating chronic myeloid leukemia

IN Bandyopadhyay, Santu, Kolkata, INDIA
Pal, Bikas Chandra, Kolkata, INDIA
Bhattacharyay, Samir, Kolkata, INDIA
Mondal, Swapan, Kolkata, INDIA
Mandal, Chhabinath, Kolkata, INDIA
Konar, Aditya, Kolkata, INDIA
Roy, Keshab Chandra, Kolkata, INDIA

Roy, Keshab Chandra, Kolkata, INDIA Biswas, Tanusree, Kolkata, INDIA

Bandyopadhyay, Gautam, Kolkata, INDIA

PA COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH, NEW DELHI, INDIA (non-U.S. corporation)

PI US 2007161704 A1 20070712

AI US 2006-640401 A1 20061218 (11)

RLI Continuation of Ser. No. US 2005-174545, filed on 6 Jul 2005, ABANDONED Continuation-in-part of Ser. No. US 2003-338689, filed on 9 Jan 2003, ABANDONED

PRAI US 2002-393750P 20020708 (60)

DT Utility

FS APPLICATION

LREP FITZPATRICK CELLA HARPER & SCINTO, 30 ROCKEFELLER PLAZA, NEW YORK, NY, 10112. US

CLMN Number of Claims: 24
ECL Exemplary Claim: 1-44
DRWN 10 Drawing Page(s)

LN.CNT 817

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

This invention relates to a pharmaceutical composition useful for treating chronic myeloid leukemia where Bcr-Abl kinase is constitutively expressed in animals and humans, and a treatment of chronic myeloid leukemia (CML) by a composition comprising an effective amount of analogs and/or salts of chlorogenic acid. The analogs are preferably sodium chlorogenate (Na-Chl) or potassium or ammonium salts, which were prepared from Chlorogenic acid or its analogs.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

```
2005:104652 USPATFULL
AΝ
       Herbal composition for treating CD33and chronic myeloid leukemia
TΤ
       and a method thereof
TN
       Bandyopadhyay, Santu, Calcutta, INDIA
       Roy, Keshab Chandra, Calcutta, INDIA
       Ray, Mitali, Calcutta, INDIA
       Banerjee, Goutam, Calcutta, INDIA
       Pal, Bikash Chandra, Calcutta, INDIA
       Biswas, Tanusree, Calcutta, INDIA
       Bhattacharya, Samir, Calcutta, INDIA
       COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH, NEW DELHI, INDIA
PA
       (non-U.S. corporation)
PΙ
       US 2005089585
                           Al
                               20050428
       US 7306817
                           B2 20071211
       US 2004-960064
                           A1 20041008 (10)
AΙ
       Division of Ser. No. US 2002-207039, filed on 30 Jul 2002, GRANTED, Pat.
RLT
       No. US 6852344 Continuation-in-part of Ser. No. US 2001-772003, filed on
       30 Jan 2001, ABANDONED
       WO 2000-IN118
PRAI
                           20001204
       US 2002-384163P
                           20020531 (60)
DT
       Utility
FS
       APPLICATION
LREP
       FITZPATRICK CELLA HARPER & SCINTO, 30 ROCKEFELLER PLAZA, NEW YORK, NY,
       10112, US
CLMN
       Number of Claims: 38
ECL
       Exemplary Claim: 1
DRWN
       8 Drawing Page(s)
LN.CNI 976
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB
       The present invention relates to a method of treating CD33+ acute and
       chronic myeloid leukemia in animals including humans, using
       fraction nos. 1 and 9 obtained from water: methanol fraction by column
       chromatography, with ratio of water and methanol ranging between 1:5 to
       5:1, wherein said water: methanol fraction is obtained from the polar
       extract of piper betel by HPLC, with retention time of 3.6 and 24.0
       minutes respectively, with said fractions used both individually, and in
       combination, and a composition comprising the said fraction nos. 1 and
       9.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
     ANSWER 4 OF 11 USPATFULL on STN
L5
                                                         DUPLICATE 2
ΑN
       2004:57084 USPATFULL
ΤI
       Herbal based composition for treating acute and chronic myeloid
       Bandyopadhyay, Santu, Calcutta, INDIA
TN
       Roy, Keshab Chandra, Calcutta, INDIA
       Ray, Mitali, Kolkata, INDIA
       Bandyopadhyay, Gautam, Kolkata, INDIA
       Pal, Bikash Chandra, Kolkata, INDIA
       Biswas, Tanusree, Kolkata, INDIA
       Bhattacharya, Samir, Kolkata, INDIA
PΙ
       US 2004043086
                           Al 20040304
       US 6967034
                           В2
                               20051122
                           Al
       US 2003-448398
                               20030530 (10)
AΤ
       US 2002-384163P
                           20020531 (60)
PRAI
DT
       Utility
FS
       APPLICATION
       FITZPATRICK CELLA HARPER & SCINTO, 30 ROCKEFELLER PLAZA, NEW YORK, NY,
LREP
       10112
CLMN
       Number of Claims: 21
```

ECL

Exemplary Claim: 1

DRWN 7 Drawing Page(s) LN.CNT 460

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A new herbal-based composition and method for treatment of CD33+ acute and chronic myeloid leukemia by Piper betel leaf extracts, and to provide a process for the isolation of active fractions from leaves or any other plant parts of Piper betel to treat CD3 3+ AML and CML with a simplified method of isolation of active components from all plant parts of Piper betel possessing biological activities relevant to the treatment of CD33+ AML and CML.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 5 OF 11 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2006:1160293 CAPLUS

DN 145:443788

TI A method of isolating fraction from aerial parts of Piper betel

IN Bandyopadhyay, Santu; Pal, Bikas Chandra; Bhattacharya, Samir; Biswas, Tanusree; Ray, Mitali; Roy, Keshab Chandra; Bandyopadhyay, Gautam

PA Council of Scientific and Industrial Research, India

SO Indian, 21 pp. CODEN: INXXAP

CODEN: INXXAP
DT Patent

LA English

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE | | |
|------------|----------------------------|------|----------------------|-----------------|----------|--|--|
| PI
PRAI | IN 195001
IN 2003-DE755 | A1 | 20041218
20030530 | IN 2003-DE755 | 20030530 | | |

AB This invention relates to a method of isolating fraction from aerial parts of Piper betel for treatment of CD33+ acute and chronic myeloid leukemia. Isolation of fractions have been carried out using polar water soluble solvents. Fractions of Piper betel leaf exts. are also purified by chromatog. methods to obtain 3-0-p-coumarylquinic acid.

L5 ANSWER 6 OF 11 USPATFULL on STN

AN 2004:69647 USPATFULL

TI Synergistic composition for treating leukemia

IN Bandyopadhyay, Santu, Kolkata, INDIA Chandra Pal, Bikash, Kolkata, INDIA Bhattacharya, Samir, Kolkata, INDIA Roy, Keshab Chandra, Kolkata, INDIA Bandyopadhyay, Gautam, Kolkata, INDIA

PA Council Of Scientific & Industrial Research, New Delhi, INDIA, 110 001

(non-U.S. corporation)
PI US 2004052874 A1

PI US 2004052874 A1 20040318 AI US 2003-613122 A1 20030707 (10)

PRAI US 2002-393750P 20020708 (60)

DT Utility FS APPLICATION

LREP FITZPATRICK CELLA HARPER & SCINTO, 30 ROCKEFELLER PLAZA, NEW YORK, NY, 10112

CLMN Number of Claims: 18
ECL Exemplary Claim: 1
DRWN 5 Drawing Page(s)

LN.CNT 685

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention provides a method of treating acute and chronic myeloid leukemia (AML & CML) and lymphoid leukemia, said method comprising administering a pharmaceutical composition comprising pharmaceutically effective amount of chlorogenic acid (CA) and 3-o-p-Coumaryl quinic acid (PCQ) isolated from any plant parts of

Piper betel or any other source, both individually or in a synergistic combination optionally along with pharmaceutically acceptable additives.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

```
L5
     ANSWER 7 OF 11 USPATFULL on STN
ΑN
       2004:7898 USPATFULL
ΤI
       Pharmaceutical composition useful for treating chronic myeloid
       Bandyopadhyay, Santu, Kolkata, INDIA
IN
       Pal, Bikas Chandra, Kolkata, INDIA
       Bhattacharyay, Samir, Kolkata, INDIA
       Mondal, Swapan, Calcutta, INDIA
       Mandal, Chhabinath, Calcutta, INDIA
       Konar, Aditya, Calcutta, INDIA
       Roy, Keshab Chandra, Calcutta, INDIA
       Biswas, Tanusree, Calcutta, INDIA
       Bandyopadhyay, Gautam, Calcutta, INDIA
       COUNCIL OF SCIENTIFIC (non-U.S. corporation)
PA
       INDUSTRIAL RESEARCH (non-U.S. corporation)
PΙ
       US 2004006138
                           A1 20040108
                           A1
ΑI
       US 2003-338689
                               20030109 (10)
PRAI
       US 2002-393750P
                           20020708 (60)
DT
       Utility
FS
       APPLICATION
LREP
       FITZPATRICK CELLA HARPER & SCINTO, 30 ROCKEFELLER PLAZA, NEW YORK, NY,
CLMN
       Number of Claims: 37
ECL
       Exemplary Claim: 1
DRWN
       8 Drawing Page(s)
LN.CNT 591
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AΒ
       The present invention relates to a pharmaceutical composition useful for
       treating chronic myeloid leukemia where Bcr-Abl kinase is
       constitutively expressed in animals and humans, said composition
       comprising an effective amount of analogs of chlorogenic acid such as
       neochlorogenic acid (5-0-caffeoyl quinic acid), cryptochlorogenic acid
       (4-O-Caffeoyl quinic acid), 3-O-(3'-methylcaffeoyl) quinic acid and
       5-O-(Caffeoyl-4'-methyl) quinic acid and/or its salts such as sodium,
       potassium and ammonium together with pharmaceutically acceptable
       additives.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
     ANSWER 8 OF 11 CAPLUS COPYRIGHT 2008 ACS on STN DUPLICATE 3
L5
     2003:971883 CAPLUS
AΝ
DN
     140:13037
     A herbal molecule as potential anti-leukemic drug
ΤI
     Bandyopadhyay, Santu; Pal, Bikash Chandra; Battacharya, Samir; Roy, Keshab
ΙN
     Chandra; Bandyopadhyay, Gautam
     Council of Scientific and Industrial Research, India
PA
     PCT Int. Appl., 34 pp.
SO
     CODEN: PIXXD2
DT
     Patent
LA
     English
```

| | PATENT NO. | | | KIN | D | DATE | | | APPLICATION NO.

WO 2002-IB5565 | | | | | | DATE | | | |
|----|------------|---------------|-----|-----|-------------|------|-----|-----|---------------------------------------|-----|-----|-----|-----|-----|----------|-----|-----|-----|
| ΡI | WO | WO 2003101446 | | | A1 20031211 | | | | | | | | | | 20021220 | | | |
| | | W: | ΑE, | AG, | AL, | AM, | ΑT, | ΑU, | ΑZ, | BA, | BB, | BG, | BR, | BY, | BZ, | CA, | CH, | CN, |
| | | | CO, | CR, | CU, | CZ, | DE, | DK, | DM, | DZ, | EC, | EE, | ES, | FI, | GB, | GD, | GE, | GH, |
| | | | GM, | HR, | HU, | ID, | IL, | IN, | IS, | JP, | ΚE, | KG, | KΡ, | KR, | KΖ, | LC, | LK, | LR, |

FAN.CNT 3

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LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ,
             UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
             FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ,
             CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     CA 2488287
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                                 20031211
                                              CA 2002-2488287
                                                                      20021220
     AU 2002348746
                                 20031219
                                              AU 2002-348746
                                                                      20021220
                           A1
     EP 1511475
                                 20050309
                                              EP 2002-781696
                                                                      20021220
                           A1
     EP 1511475
                                 20051005
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             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK
     CN 1646112
                                 20050727
                                              CN 2002-829404
                                                                      20021220
                           Α
     JP 2005531593
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                                 20051020
                                              JP 2004-508804
                                                                      20021220
     RU 2314096
                           C2
                                 20080110
                                              RU 2004-135078
                                                                      20021220
     US 20030229140
                                 20031211
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                           Α1
                                                                      20030109
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                                              CA 2003-2492278
                                                                      20030110
                           Α1
     WO 2004004708
                                 20040115
                                              WO 2003-IB44
                           Α1
                                                                      20030110
     WO 2004004708
                           Α9
                                 20060504
             AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SC, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
             FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     AU 2003201062
                                 20040123
                                             AU 2003-201062
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                                                                      20030110
                                 20050427
     EP 1524973
                                              EP 2003-762826
                                                                      20030110
                           Α1
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
     CN 1678300
                                 20051005
                                              CN 2003-820559
                           Α
                                                                      20030110
     JP 2006519752
                           Τ
                                 20060831
                                              JP 2004-519034
                                                                      20030110
     US 20040043086
                                 20040304
                                              US 2003-448398
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     US 6967034
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     US 20040052874
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     IN 2003DE01280
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                                              IN 2003-DE1280
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                                                                      20031016
     IN 2004DN02396
                                 20070406
                                              IN 2004-DN2396
                           Α
                                                                      20040817
                                 20020531
PRAI US 2002-384163P
                           Ρ
     US 2002-393750P
                           Ρ
                                 20020708
     WO 2002-IB5565
                                 20021220
                           W
     US 2003-338688
                                 20030109
                           Α
     WO 2003-IB44
                                 20030110
                           W
     IN 2003-DN643
                           А3
                                 20030428
     US 2003-613122
                           Α
                                 20030707
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AB The present invention relates to a new use of the compound chlorogenic acid isolated from the piper betel leaf extract or from any other sources for the treatment of acute and chronic myeloid leukemia and lymphoid leukemia, and the present invention also provides a pharmaceutical composition comprising chlorogenic acid along with pharmaceutically acceptable additive for the treatment of acute and chronic myeloid leukemia and lymphoid leukemia.

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 9 OF 11 USPATFULL on STN

DUPLICATE 4

AN 2003:71049 USPATFULL

TI Herbal composition for treating CD33+ acute and chronic myeloid leukemia and a method thereof

```
Bandyopadhyay, Santu, Calcutta, INDIA
IN
       Roy, Keshab Chandra, Calcutta, INDIA
       Ray, Mitali, Calcutta, INDIA
       Banerjee, Goutam, Calcutta, INDIA
       Pal, Bikash Chandra, Calcutta, INDIA
       Biswas, Tanusree, Calcutta, INDIA
       Bhattacharya, Samir, Calcutta, INDIA
PA
       COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH (non-U.S. corporation)
PΙ
       US 2003049334
                           A1
                               20030313
       US 6852344
                           B2 20050208
       US 2002-207039
                           A1 20020730 (10)
AΙ
       Continuation-in-part of Ser. No. US 2001-772003, filed on 30 Jan 2001,
RLI
       ABANDONED
       WO 2000-IN118
PRAI
                           20001204
       US 2002-384163P
                           20020531 (60)
DT
       Utility
FS
       APPLICATION
       FITZPATRICK CELLA HARPER & SCINTO, 30 ROCKEFELLER PLAZA, NEW YORK, NY,
LREP
       10112
       Number of Claims: 46
CLMN
ECL
       Exemplary Claim: 1
DRWN
       8 Drawing Page(s)
LN.CNT 1041
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       The present invention relates to a method of treating CD33+ acute and
       chronic myeloid leukemia in animals including humans, using
       fraction nos. 1 and 9 obtained from water: methanol fraction by column
       chromatography, with ratio of water and methanol ranging between 1:5 to
       5:1, wherein said water: methanol fraction is obtained from the polar
       extract of piper betel by HPLC, with retention time of 3.6 and 24.0
       minutes respectively, with said fractions used both individually, and in
       combination, and a composition comprising the said fraction nos. 1 and
       9.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
L5
     ANSWER 10 OF 11 USPATFULL on STN
ΑN
       2003:325158 USPATFULL
ΤI
       Herbal molecule as potential anti-leukemic drug
       Bandyopadhyay, Santu, Calcutta, INDIA
ΤN
       Pal, Bikash Chandra, Kolkata, INDIA
       Bhattacharya, Samir, Kolkata, INDIA
       Roy, Keshab Chandra, Kolkata, INDIA
       Bandyopadhyay, Gautam, Kolkata, INDIA
PΙ
       US 2003229140
                           A1 20031211
       US 2003-338688
ΑТ
                           A1 20030109 (10)
PRAI
       WO 2002-IB5565
                           20021220
       US 2002-384163P
                           20020531 (60)
       US 2002-393750P
                           20020708 (60)
DT
       Utility
FS
       APPLICATION
       FITZPATRICK CELLA HARPER & SCINTO, 30 ROCKEFELLER PLAZA, NEW YORK, NY,
LREP
       10112
       Number of Claims: 49
CLMN
       Exemplary Claim: 1
ECL
DRWN
       3 Drawing Page(s)
LN.CNT 676
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AΒ
       The present invention relates to a new use of the compound chlorogenic
       acid isolated from the piper betel leaf extract or from any other
```

sources for the treatment of acute and chronic myeloid leukemia and lymphoid leukemia, and the present invention also provides

a pharmaceutical composition comprising chloregenic acid along with pharmaceutically acceptable additive for the treatment of acute and chronic myeloid leukemia and lymphoid leukemia.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

```
L5
     ANSWER 11 OF 11 USPATFULL on STN
ΑN
       2002:133246 USPATFULL
TΙ
       Antimonocytic activity of betel leaf extracts
       Bandyopadhyay, Santu, Calcutta, INDIA
ΙN
       Pal, Bikash, Calcutta, INDIA
       Bhattacharya, Samir, Calcutta, INDIA
       Ray, Mitali, Calcutta, INDIA
       Roy, Keshab Chandra, Calcutta, INDIA
       US 2002068096
                          A1 20020606
PΤ
       US 2001-772003
                           A1 20010130 (9)
ΑТ
       WO 2000-IN118
                           20001204
PRAI
DТ
       Utility
FS
       APPLICATION
       FITZPATRICK CELLA HARPER & SCINTO, 30 ROCKEFELLER PLAZA, NEW YORK, NY,
LREP
       10112
CLMN
       Number of Claims: 39
ECL
       Exemplary Claim: 1
DRWN
       1 Drawing Page(s)
LN.CNT 364
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       This invention relates to anti-monocytic activity of betel leaf extracts
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to treat myeloid leukemia in animal and human beings.

and this anti monocytic activity of betel leaf extracts suggest its use

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

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=> s 928012-37-7/rn
'RN' IS NOT A VALID FIELD CODE
NUMERIC VALUE NOT VALID '928012-37-7'
'RN' IS NOT A VALID FIELD CODE
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'RN' IS NOT A VALID FIELD CODE

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'RN' IS NOT A VALID FIELD CODE
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L6 3 928012-37-7/RN
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=> dup rem 16

DUPLICATE IS NOT AVAILABLE IN 'ADISINSIGHT, ADISNEWS, DGENE, DRUGMONOG2, IMSPRODUCT, KOSMET, NUTRACEUT, PCTGEN, PHARMAML, USGENE'.
ANSWERS FROM THESE FILES WILL BE CONSIDERED UNIQUE
PROCESSING COMPLETED FOR L6

L7 3 DUP REM L6 (0 DUPLICATES REMOVED)

=> s 17 and leukemia

L8 0 L7 AND LEUKEMIA

=> d 17 bib abs 1-3

- L7 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2008 ACS on STN
- AN 2007:16930 CAPLUS
- DN 146:301878
- TI Profiling the Chlorogenic Acids and Other Caffeic Acid Derivatives of Herbal Chrysanthemum by LC-MSn
- AU Clifford, Michael N.; Wu, Weiguo; Kirkpatrick, Jo; Kuhnert, Nikolai
- CS School of Biomedical and Molecular Sciences, Centre for Nutrition and Food Safety, University of Surrey, Guildford, Surrey, GU2 7XH, UK
- SO Journal of Agricultural and Food Chemistry (2007), 55(3), 929-936 CODEN: JAFCAU; ISSN: 0021-8561
- PB American Chemical Society
- DT Journal
- LA English
- AB Four samples of herbal chrysanthemum were profiled qual. by LC-MS5 to identify their component chlorogenic acids and partially characterize other caffeic acid derivs. The chlorogenic acids were minor components, and the 4 samples varied markedly in profile. Three p-coumaroylquinic acids, 3 feruloylquinic acids, 4 caffeoylquinic acids, 6 dicaffeoylquinic acids, and 2 tricaffeoylquinic acids were detected, 13 for the first time from this source. Partial characterization of minor components suggested the presence of five caffeoyl-hexose esters and caffeic acid-4- β -D-glucose that have not previously been reported from this source, and eight caffeoylquinic acid glycosides and 16 dicaffeoylquinic acid glycosides that have not previously been reported in nature. Succinic acid-containing chlorogenic acids and chlorogenic acids based on epi-quinic acid, previously reported in Chrysanthemum spp., were not detected in these samples.
- RE.CNT 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L7 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2008 ACS on STN
- AN 2006:1081081 CAPLUS
- DN 146:415997
- TI Genome-wide analysis of the structural genes regulating defense phenylpropanoid metabolism in Populus
- AU Tsai, Chung-Jui; Harding, Scott A.; Tschaplinski, Timothy J.; Lindroth, Richard L.; Yuan, Yinan
- CS Biotechnology Research Center, School of Forest Resources and Environmental Science, Michigan Technological University, Houghton, MI, 49931, USA
- SO New Phytologist (2006), 172(1), 47-62 CODEN: NEPHAV; ISSN: 0028-646X
- PB Blackwell Publishing Ltd.
- DT Journal
- LA English

Salicin-based phenolic glycosides, hydroxycinnamate derivs. and AB flavonoid-derived condensed tannins comprise up to one-third of Populus leaf dry mass. Genes regulating the abundance and chemical diversity of these substances have not been comprehensively analyzed in tree species exhibiting this metabolically demanding level of phenolic metabolism Here, shikimate-phenylpropanoid pathway genes thought to give rise to these phenolic products were annotated from the Populus genome, their expression assessed by semiquant. or quant. reverse transcription polymerase chain reaction (PCR), and metabolic evidence for function presented. Unlike Arabidopsis, Populus leaves accumulate an array of hydroxycinnamoylquinate esters, which is consistent with broadened function of the expanded hydroxycinnamoyl-CoA transferase gene family. Greater flavonoid pathway diversity is also represented, and flavonoid gene families are larger. Consistent with expanded pathway function, most of these genes were upregulated during wound-stimulated condensed tannin synthesis in leaves. The suite of Populus genes regulating phenylpropanoid product accumulation should have important application in managing phenolic carbon pools in relation to climate change and global carbon cycling.

RE.CNT 86 THERE ARE 86 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L7 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2008 ACS on STN
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AN 1974:576186 CAPLUS

DN 81:176186

OREF 81:27167a,27170a

TI Polarimetric analysis of hydroxycinnamic acid esters

AU Dranik, L. I.; Litvinenko, V. I.

CS Khar'k. Nauchno-Issled. Khim.-Farm. Inst., Kharkov, USSR

SO Fenol'nye Soedin. Ikh Fiziol. Svoistva, Mater. Vses. Simp. Fenol'nym Soedin., 2nd (1973), Meeting Date 1971, 176-80. Editor(s): Klyshev, L. K. Publisher: "Nauka" Kaz. SSR, Alma-Ata, USSR. CODEN: 28MHAX

DT Conference

LA Russian

AB Polarimetric measurements of the following esters of quinic acid were performed: 1-caffeyl, 1-feruloyl, 1-(p-coumaroyl), 1-galloyl, 5-caffeyl, 5-(p-coumaroyl), 5-galloyl, 3-pheruloyl, 3-(p-coumaroyl), 3-galloyl, 4-caffeyl, 4-(p-coumaroy), 4-galloyl, 4,5-dicafferyl, 1,5-dicaffeyl, 1,4-dicaffeyl, and 4,5-digalloyl. For measurements the substances were dissolved in either H2O, MeOH, or Me2CO. Conformations of the esters measured were suggested.

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=> s 13 and cancer
8 FILES SEARCHED...
L9 18 L3 AND CANCER
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L9 10 L3 AND CANCER

=> dup rem 19
DUPLICATE IS NOT AVAILABLE IN 'ADISINSIGHT, ADISNEWS, DGENE, DRUGMONOG2,
IMSPRODUCT, KOSMET, NUTRACEUT, PCTGEN, PHARMAML, USGENE'.
ANSWERS FROM THESE FILES WILL BE CONSIDERED UNIQUE
PROCESSING COMPLETED FOR L9
L10 12 DUP REM L9 (6 DUPLICATES REMOVED)

=> d 110 1-12 bib abs

L10 ANSWER 1 OF 12 USPATFULL on STN

AN 2007:210325 USPATFULL

 ${\tt TI}$ Herbal composition for treating CD33+ acute and chronic myeloid leukemia and a method thereof

IN Bandyopadhyay, Santu, Calcutta, INDIA Roy, Keshab Chandra, Calcutta, INDIA

Ray, Mitali, Calcutta, INDIA Banerjee, Goutam, Calcutta, INDIA Pal, Bikash Chandra, Calcutta, INDIA Biswas, Tanusree, Calcutta, INDIA Bhattacharya, Samir, Calcutta, INDIA PACOUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH, NEW DELHI, INDIA (non-U.S. corporation) PΙ US 2007184131 A1 20070809 US 2007-730433 A1 20070402 (11) ΑI RLI Division of Ser. No. US 2004-960064, filed on 8 Oct 2004, PENDING Division of Ser. No. US 2002-207039, filed on 30 Jul 2002, GRANTED, Pat. No. US 6852344 Continuation-in-part of Ser. No. US 2001-772003, filed on 30 Jan 2001, ABANDONED PRAI WO 2000-IN118 20001204 US 2002-384163P 20020531 (60) DT Utility APPLICATION FS FITZPATRICK CELLA HARPER & SCINTO, 30 ROCKEFELLER PLAZA, NEW YORK, NY, LREP 10112, US Number of Claims: 31 CLMN ECL Exemplary Claim: 1 DRWN 8 Drawing Page(s) LN.CNT 914 CAS INDEXING IS AVAILABLE FOR THIS PATENT. A method of treating CD33+ acute and chronic myeloid leukemia in animals including humans, using fraction nos. 1 and 9 obtained from water: methanol fraction by column chromatography, with ratio of water and methanol ranging between 1:5 to 5:1, wherein said water:methanol fraction is obtained from the polar extract of Piper betel by HPLC, with retention time of 3.6 and 24.0 minutes respectively, with said fractions used both individually, and in combination. CAS INDEXING IS AVAILABLE FOR THIS PATENT. L10 ANSWER 2 OF 12 USPATFULL on STN ΑN 2007:184711 USPATFULL ΤI Pharmaceutical composition useful for treating chronic myeloid leukemia ΙN Bandyopadhyay, Santu, Kolkata, INDIA Pal, Bikas Chandra, Kolkata, INDIA Bhattacharyay, Samir, Kolkata, INDIA Mondal, Swapan, Kolkata, INDIA Mandal, Chhabinath, Kolkata, INDIA Konar, Aditya, Kolkata, INDIA Roy, Keshab Chandra, Kolkata, INDIA Biswas, Tanusree, Kolkata, INDIA Bandyopadhyay, Gautam, Kolkata, INDIA PACOUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH, NEW DELHI, INDIA (non-U.S. corporation) PΙ US 2007161704 20070712 A1AΤ US 2006-640401 A1 20061218 (11) Continuation of Ser. No. US 2005-174545, filed on 6 Jul 2005, ABANDONED RLI Continuation-in-part of Ser. No. US 2003-338689, filed on 9 Jan 2003, **ABANDONED** US 2002-393750P 20020708 (60) PRAT DT Utility FS APPLICATION FITZPATRICK CELLA HARPER & SCINTO, 30 ROCKEFELLER PLAZA, NEW YORK, NY, LREP 10112, US Number of Claims: 24 CLMN Exemplary Claim: 1-44 ECL DRWN 10 Drawing Page(s)

LN.CNT 817

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

This invention relates to a pharmaceutical composition useful for treating chronic myeloid leukemia where Bcr-Abl kinase is constitutively expressed in animals and humans, and a treatment of chronic myeloid leukemia (CML) by a composition comprising an effective amount of analogs and/or salts of chlorogenic acid. The analogs are preferably sodium chlorogenate (Na-Chl) or potassium or ammonium salts, which were prepared from Chlorogenic acid or its analogs.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

- L10 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2008 ACS on STN DUPLICATE 1
- AN 2007:1372987 CAPLUS
- DN 148:190778
- TI Polyphenols Are Intensively Metabolized in the Human Gastrointestinal Tract after Apple Juice Consumption
- AU Kahle, Kathrin; Huemmer, Wolfgang; Kempf, Michael; Scheppach, Wolfgang; Erk, Thomas; Richling, Elke
- CS Department of Food Chemistry, University of Wuerzburg, Wuerzburg, Germany
- SO Journal of Agricultural and Food Chemistry (2007), 55(26), 10605-10614 CODEN: JAFCAU; ISSN: 0021-8561
- PB American Chemical Society
- DT Journal
- LA English
- AΒ Polyphenols are secondary plant compds. showing anticarcinogenic effects both in vitro and in animal expts. and may thus reduce the risk of colorectal cancer in man. The identification of polyphenol metabolites formed via their passage through the small intestine of healthy ileostomy subjects after apple juice consumption is presented. Identification and quantification of polyphenols and their metabolites were performed using HPLC-DAD as well as HPLC-ESI-MS/MS. Total procyanidin content (TPA) was measured, and addnl. the mean d.p. (DPm) of the procyanidins was determined in the apple juice and ileostomy effluents. products of polyphenol metabolism, D-(-)-quinic acid and Me esters of caffeic acid and p-coumaric acid are liberated from the corresponding hydroxycinnamic acid esters. 1-Caffeoylquinic acid and 3-caffeoylquinic acid were determined as products of isomerization. Phloretin 2'-O-glucoside (phloridzin) and phloretin 2'-O-xyloglucoside were metabolized into the corresponding aglycons phloretin and phloretin 2'-O-glucuronide and all were found in the ileostomy effluent. Ninety percent of the consumed procyanidins were recovered in the ileostomy effluent and therefore would reach the colon under physiol. circumstances. The DPm was reduced (DPm of apple juice = 5.7) and varied depending on the time point of excretion. The gastrointestinal passage seems to play an important role in the colonic availability of apple polyphenols.
- L10 ANSWER 4 OF 12 CAPLUS COPYRIGHT 2008 ACS on STN DUPLICATE 2
- AN 2006:256838 CAPLUS
- DN 145:241079
- TI Apple flavonoids inhibit growth of HT29 human colon cancer cells and modulate expression of genes involved in the biotransformation of xenobiotics
- AU Veeriah, Selvaraju; Kautenburger, Tanja; Habermann, Nina; Sauer, Julia; Dietrich, Helmut; Will, Frank; Pool-Zobel, Beatrice Louise
- CS Department of Nutritional Toxicology, Institute for Nutrition, Friedrich-Schiller-University, Jena, Germany
- SO Molecular Carcinogenesis (2006), 45(3), 164-174 CODEN: MOCAE8; ISSN: 0899-1987
- PB Wiley-Liss, Inc.
- DT Journal
- LA English
- AB Flavonoids from fruits and vegetables probably reduce risks of diseases

associated with oxidative stress, including cancer. Apples contain significant amts. of flavonoids with antioxidative potential. The objectives of this study were to investigate such compds. for properties associated with reduction of cancer risks. We report herein that apple flavonoids from an apple extract (AE) inhibit colon cancer cell growth and significantly modulate expression of genes related to xenobiotic metabolism HT29 cells were treated with AE at concns. delivering $5-50 \mu M$ of one of the major ingredients, phloridzin ("phloridzin-equivalent," Ph.E), to the cell culture medium, with a synthetic flavonoid mixture mimicking the composition of the AE or with $5-100~\mu\mathrm{M}$ individual flavonoids. HT29 cell growth was inhibited by the complex extract and by the mixture HT29 cells were treated with nontoxic doses of the AE (30 μM , Ph.E) and after 24 h total RNA was isolated to elucidate patterns of gene expression using a human cDNA-microarray (SuperArray) spotted with 96 genes of drug metabolism Treatment with AE resulted in an upregulation of several genes (GSTP1, GSTT2, MGST2, CYP4F3, CHST5, CHST6, and CHST7) and downregulation of EPHX1, in comparison to the medium controls. The enhanced transcriptional activity of GSTP1 and GSTT2 genes was confirmed with real-time qRT-PCR. On the basis of the pattern of differential gene expression found here, we conclude that apple flavonoids modulate toxicol. defense against colon cancer risk factors. In addition to the inhibition of tumor cell proliferation, this could be a mechanism of cancer risk reduction

RE.CNT 55 THERE ARE 55 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
L10 ANSWER 5 OF 12 USPATFULL on STN
                                                        DUPLICATE 3
ΑN
       2005:104652 USPATFULL
ΤI
       Herbal composition for treating CD33and chronic myeloid leukemia and a
       method thereof
       Bandyopadhyay, Santu, Calcutta, INDIA
TN
       Roy, Keshab Chandra, Calcutta, INDIA
       Ray, Mitali, Calcutta, INDIA
       Banerjee, Goutam, Calcutta, INDIA
       Pal, Bikash Chandra, Calcutta, INDIA
       Biswas, Tanusree, Calcutta, INDIA
       Bhattacharya, Samir, Calcutta, INDIA
       COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH, NEW DELHI, INDIA
PA
       (non-U.S. corporation)
       US 2005089585
                          A1 20050428
ΡI
       US 7306817
                          B2 20071211
       US 2004-960064
                          A1 20041008 (10)
ΑI
       Division of Ser. No. US 2002-207039, filed on 30 Jul 2002, GRANTED, Pat.
RLI
       No. US 6852344 Continuation-in-part of Ser. No. US 2001-772003, filed on
       30 Jan 2001, ABANDONED
       WO 2000-IN118
                          20001204
PRAI
       US 2002-384163P
                          20020531 (60)
       Utility
DT
FS
       APPLICATION
LREP
       FITZPATRICK CELLA HARPER & SCINTO, 30 ROCKEFELLER PLAZA, NEW YORK, NY,
       10112, US
       Number of Claims: 38
CLMN
ECL
       Exemplary Claim: 1
DRWN
       8 Drawing Page(s)
LN.CNT 976
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
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The present invention relates to a method of treating CD33+ acute and chronic myeloid leukemia in animals including humans, using fraction nos. 1 and 9 obtained from water:methanol fraction by column chromatography, with ratio of water and methanol ranging between 1:5 to 5:1, wherein said water:methanol fraction is obtained from the polar extract of piper betel by HPLC, with retention time of 3.6 and 24.0

minutes respectively, with said fractions used both individually, and in combination, and a composition comprising the said fraction nos. 1 and 9.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

- L10 ANSWER 6 OF 12 CAPLUS COPYRIGHT 2008 ACS on STN DUPLICATE 4
- AN 2006:50637 CAPLUS
- DN 145:313988
- TI Colonic availability of apple polyphenols a study in ileostomy subjects
- AU Kahle, Kathrin; Kraus, Michael; Scheppach, Wolfgang; Richling, Elke
- CS Department of Food Chemistry, University of Wuerzburg, Wuerzburg, Germany
- SO Molecular Nutrition & Food Research (2005), 49(12), 1143-1150 CODEN: MNFRCV; ISSN: 1613-4125
- PB Wiley-VCH Verlag GmbH & Co. KGaA
- DT Journal
- LA English
- Nutrition is thought to play an essential role in the pathogenesis of AB inflammatory and malignant gastrointestinal diseases. It is well known that plant ingredients such as polyphenols and flavonoids show anticarcinogenic effects both in vitro and in animal expts., and may thus reduce the risk of colorectal cancer in man. The aim of the study was to determine the amount of polyphenols reaching the colon after oral intake of apple juice. After consumption of a polyphenol-free diet 11 healthy ileostomy volunteers drank 1 L of a polyphenol-rich cloudy apple juice. Ileostomy effluent was collected immediately before and 1, 2, 4, 6, and 8 h after consumption of apple juice. A broad spectrum of polyphenols was identified using HPLC-diode array detection (HPLC-DAD) as well as HPLC-ESI-MS/MS; quantitation was performed with HPLC-DAD. Most of the orally administered apple polyphenols were absorbed from or metabolized in the small intestine. Between 0 and 33% of the oral dose was recovered in the ileostomy bags with a maximum of excretion after 2 h. Phloretin glucuronide as product of polyphenol metabolism was detected in the ileostomy effluent. The present results show that most of the apple juice polyphenols are absorbed in the small intestine. Minor amts. of unmetabolized polyphenols are recovered in the ileostomy effluent, which would reach the colon under physiol. circumstances. These data have to be considered when polyphenols are used in model systems to show preventive effects in colorectal carcinogenesis.
- RE.CNT 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L10 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2008 ACS on STN
- AN 2005:457191 CAPLUS
- DN 144:68997
- TI Inhibitors of the epidermal growth factor receptor in apple juice extract
- AU Kern, Melanie; Tjaden, Zeina; Ngiewih, Yufanyi; Puppel, Nicole; Will, Frank; Dietrich, Helmut; Pahlke, Gudrun; Marko, Doris
- CS Department of Chemistry, Division of Food Chemistry and Environmental Toxicology, University of Kaiserslautern, Kaiserslautern, Germany
- SO Molecular Nutrition & Food Research (2005), 49(4), 317-328 CODEN: MNFRCV; ISSN: 1613-4125
- PB Wiley-VCH Verlag GmbH & Co. KGaA
- DT Journal
- LA English
- AB The polyphenol-rich extract of a consumer-relevant apple juice blend was found to potently inhibit the growth of the human colon cancer cell line HT29 in vitro. The epidermal growth factor receptor (EGFR) and its subsequent signaling cascade play an important role in the regulation of cell proliferation in HT29 cells. The protein tyrosine kinase activity of an EGFR preparation was effectively inhibited by the polyphenol-rich apple juice extract Treatment of intact cells with this extract resulted in the

suppression of the subsequent mitogen-activated protein kinase cascade. Amongst the so far identified apple juice constituents, the proanthocyanidins B1 and B2 as well as quercetin-3-glc (isoquercitrin) and quercetin-3-gal (hyperoside) were found to possess substantial EGFR-inhibitory properties. However, as to be expected from the final concentration of these potential EGFR inhibitors in the original polyphenol-rich extract, a synthetic mixture of the apple juice constituents identified and available so far, including both proanthocyanidins and the guercetin glycosides, showed only marginal inhibitory effects on the EGFR. These results permit the assumption that yet unknown constituents contribute substantially to the potent EGFR-inhibitory properties of polyphenol-rich apple juice extract In summary, the polyphenol composition of apple juice possesses promising growth-inhibitory properties, affecting proliferation-associated signaling cascades in colon tumor cells. RE.CNT 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT L10 ANSWER 8 OF 12 USPATFULL on STN DUPLICATE 5 2004:57084 USPATFULL Herbal based composition for treating acute and chronic myeloid leukemia Bandyopadhyay, Santu, Calcutta, INDIA Roy, Keshab Chandra, Calcutta, INDIA Ray, Mitali, Kolkata, INDIA Bandyopadhyay, Gautam, Kolkata, INDIA Pal, Bikash Chandra, Kolkata, INDIA Biswas, Tanusree, Kolkata, INDIA Bhattacharya, Samir, Kolkata, INDIA US 2004043086 A1 20040304 US 6967034 B2 20051122 A1 20030530 (10) US 2003-448398 20020531 (60) PRAI US 2002-384163P Utility APPLICATION LREP FITZPATRICK CELLA HARPER & SCINTO, 30 ROCKEFELLER PLAZA, NEW YORK, NY, 10112 CLMN Number of Claims: 21 ECL Exemplary Claim: 1 DRWN 7 Drawing Page(s) LN.CNT 460 CAS INDEXING IS AVAILABLE FOR THIS PATENT. A new herbal-based composition and method for treatment of CD33+ acute and chronic myeloid leukemia by Piper betel leaf extracts, and to provide a process for the isolation of active fractions from leaves or any other plant parts of Piper betel to treat CD3 3+ AML and CML with a simplified method of isolation of active components from all plant parts of Piper betel possessing biological activities relevant to the treatment of CD33+ AML and CML. CAS INDEXING IS AVAILABLE FOR THIS PATENT. L10 ANSWER 9 OF 12 USPATFULL on STN 2004:69647 USPATFULL Synergistic composition for treating leukemia

ΑN

TΙ ΙN

PΙ

AΤ

DТ

FS

AB

ΑN ΤI ΙN Bandyopadhyay, Santu, Kolkata, INDIA Chandra Pal, Bikash, Kolkata, INDIA Bhattacharya, Samir, Kolkata, INDIA Roy, Keshab Chandra, Kolkata, INDIA Bandyopadhyay, Gautam, Kolkata, INDIA PΑ Council Of Scientific & Industrial Research, New Delhi, INDIA, 110 001 (non-U.S. corporation) US 2004052874 PΤ A1 20040318

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US 2003-613122
                           A1 20030707 (10)
AΙ
PRAI
       US 2002-393750P
                           20020708 (60)
       Utility
DT
FS
       APPLICATION
LREP
       FITZPATRICK CELLA HARPER & SCINTO, 30 ROCKEFELLER PLAZA, NEW YORK, NY,
       10112
CLMN
       Number of Claims: 18
ECL
       Exemplary Claim: 1
DRWN
       5 Drawing Page(s)
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       The present invention provides a method of treating acute and chronic
       myeloid leukemia (AML & CML) and lymphoid leukemia, said method
       comprising administering a pharmaceutical composition comprising
       pharmaceutically effective amount of chlorogenic acid (CA) and
       3-o-p-Coumaryl quinic acid (PCQ) isolated from any plant parts of Piper
       betel or any other source, both individually or in a synergistic
       combination optionally along with pharmaceutically acceptable additives.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
L10 ANSWER 10 OF 12 USPATFULL on STN
       2004:7898 USPATFULL
ΑN
ΤI
       Pharmaceutical composition useful for treating chronic myeloid leukemia
       Bandyopadhyay, Santu, Kolkata, INDIA
ΙN
       Pal, Bikas Chandra, Kolkata, INDIA
       Bhattacharyay, Samir, Kolkata, INDIA
       Mondal, Swapan, Calcutta, INDIA
       Mandal, Chhabinath, Calcutta, INDIA
       Konar, Aditya, Calcutta, INDIA
       Roy, Keshab Chandra, Calcutta, INDIA
       Biswas, Tanusree, Calcutta, INDIA
       Bandyopadhyay, Gautam, Calcutta, INDIA
       COUNCIL OF SCIENTIFIC (non-U.S. corporation)
PA
       INDUSTRIAL RESEARCH (non-U.S. corporation)
PΙ
       US 2004006138
                          A1 20040108
       US 2003-338689
                           A1 20030109 (10)
PRAI
       US 2002-393750P
                          20020708 (60)
DT
       Utility
FS
       APPLICATION
       FITZPATRICK CELLA HARPER & SCINTO, 30 ROCKEFELLER PLAZA, NEW YORK, NY,
LREP
CLMN
       Number of Claims: 37
ECL
       Exemplary Claim: 1
DRWN
       8 Drawing Page(s)
LN.CNT 591
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       The present invention relates to a pharmaceutical composition useful for
AB
       treating chronic myeloid leukemia where Bcr-Abl kinase is constitutively
       expressed in animals and humans, said composition comprising an
       effective amount of analogs of chlorogenic acid such as neochlorogenic
       acid (5-0-caffeoyl quinic acid), cryptochlorogenic acid (4-0-Caffeoyl
       quinic acid), 3-0-(3'-methylcaffeoyl) quinic acid and
       5-0-(Caffeoyl-4'-methyl) quinic acid and/or its salts such as sodium,
       potassium and ammonium together with pharmaceutically acceptable
       additives.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
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L10 ANSWER 11 OF 12 USPATFULL on STN DUPLICATE 6 AN 2003:71049 USPATFULL

TI Herbal composition for treating CD33+ acute and chronic myeloid leukemia

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and a method thereof
       Bandyopadhyay, Santu, Calcutta, INDIA
TN
       Roy, Keshab Chandra, Calcutta, INDIA
       Ray, Mitali, Calcutta, INDIA
       Banerjee, Goutam, Calcutta, INDIA
       Pal, Bikash Chandra, Calcutta, INDIA
       Biswas, Tanusree, Calcutta, INDIA
       Bhattacharya, Samir, Calcutta, INDIA
PΑ
       COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH (non-U.S. corporation)
PΙ
       US 2003049334
                           A1
                              20030313
       US 6852344
                           B2 20050208
                           A1 20020730 (10)
ΑI
       US 2002-207039
RLI
       Continuation-in-part of Ser. No. US 2001-772003, filed on 30 Jan 2001,
       ABANDONED
       WO 2000-IN118
                           20001204
PRAI
       US 2002-384163P
                           20020531 (60)
       Utility
DT
FS
       APPLICATION
LREP
       FITZPATRICK CELLA HARPER & SCINTO, 30 ROCKEFELLER PLAZA, NEW YORK, NY,
       10112
CLMN
       Number of Claims: 46
ECL
       Exemplary Claim: 1
DRWN
       8 Drawing Page(s)
LN.CNT 1041
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       The present invention relates to a method of treating CD33+ acute and
       chronic myeloid leukemia in animals including humans, using fraction
       nos. 1 and 9 obtained from water: methanol fraction by column
       chromatography, with ratio of water and methanol ranging between 1:5 to
       5:1, wherein said water: methanol fraction is obtained from the polar
       extract of piper betel by HPLC, with retention time of 3.6 and 24.0
       minutes respectively, with said fractions used both individually, and in
       combination, and a composition comprising the said fraction nos. 1 and
       9.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
L10 ANSWER 12 OF 12 USPATFULL on STN
ΑN
       2003:325158 USPATFULL
       Herbal molecule as potential anti-leukemic drug
ТΤ
       Bandyopadhyay, Santu, Calcutta, INDIA
ΤN
       Pal, Bikash Chandra, Kolkata, INDIA
       Bhattacharya, Samir, Kolkata, INDIA
       Roy, Keshab Chandra, Kolkata, INDIA
       Bandyopadhyay, Gautam, Kolkata, INDIA
PΙ
       US 2003229140
                           A1 20031211
       US 2003-338688
AΙ
                           A1 20030109 (10)
                           20021220
PRAI
       WO 2002-IB5565
       US 2002-384163P
                           20020531 (60)
       US 2002-393750P
                           20020708 (60)
DT
       Utility
FS
       APPLICATION
LREP
       FITZPATRICK CELLA HARPER & SCINTO, 30 ROCKEFELLER PLAZA, NEW YORK, NY,
       Number of Claims: 49
CLMN
       Exemplary Claim: 1
ECL
DRWN
       3 Drawing Page(s)
LN.CNT 676
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       The present invention relates to a new use of the compound chlorogenic
       acid isolated from the piper betel leaf extract or from any other
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sources for the treatment of acute and chronic myeloid leukemia and

lymphoid leukemia, and the present invention also provides a pharmaceutical composition comprising chloregenic acid along with pharmaceutically acceptable additive for the treatment of acute and chronic myeloid leukemia and lymphoid leukemia.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

15 L3 AND TUMOR

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> s 13 and tumor

28 FILES SEARCHED...

=> s 13 and tumour L12 0 L3 AND TUMOUR => dup rem 111 DUPLICATE IS NOT AVAILABLE IN 'ADISINSIGHT, ADISNEWS, DGENE, DRUGMONOG2, IMSPRODUCT, KOSMET, NUTRACEUT, PCTGEN, PHARMAML, USGENE'. ANSWERS FROM THESE FILES WILL BE CONSIDERED UNIQUE PROCESSING COMPLETED FOR L11 L13 9 DUP REM L11 (6 DUPLICATES REMOVED) => d 113 bib abs 1-9 L13 ANSWER 1 OF 9 USPATFULL on STN AN 2007:184711 USPATFULL ΤТ Pharmaceutical composition useful for treating chronic myeloid leukemia ΤN Bandyopadhyay, Santu, Kolkata, INDIA Pal, Bikas Chandra, Kolkata, INDIA Bhattacharyay, Samir, Kolkata, INDIA Mondal, Swapan, Kolkata, INDIA Mandal, Chhabinath, Kolkata, INDIA Konar, Aditya, Kolkata, INDIA Roy, Keshab Chandra, Kolkata, INDIA Biswas, Tanusree, Kolkata, INDIA Bandyopadhyay, Gautam, Kolkata, INDIA PACOUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH, NEW DELHI, INDIA (non-U.S. corporation) PΙ US 2007161704 Α1 20070712 US 2006-640401 A1 20061218 (11) ΑI Continuation of Ser. No. US 2005-174545, filed on 6 Jul 2005, ABANDONED RLI Continuation-in-part of Ser. No. US 2003-338689, filed on 9 Jan 2003, ABANDONED PRAI US 2002-393750P 20020708 (60) DT Utility FS APPLICATION LREP FITZPATRICK CELLA HARPER & SCINTO, 30 ROCKEFELLER PLAZA, NEW YORK, NY, 10112, US Number of Claims: 24 CLMN ECL Exemplary Claim: 1-44 DRWN 10 Drawing Page(s) LN.CNT 817 CAS INDEXING IS AVAILABLE FOR THIS PATENT. This invention relates to a pharmaceutical composition useful for treating chronic myeloid leukemia where Bcr-Abl kinase is constitutively expressed in animals and humans, and a treatment of chronic myeloid leukemia (CML) by a composition comprising an effective amount of analogs and/or salts of chlorogenic acid. The analogs are preferably sodium chlorogenate (Na-Chl) or potassium or ammonium salts, which were prepared from Chlorogenic acid or its analogs.

- L13 ANSWER 2 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN
- AN 2007:334525 CAPLUS
- DN 146:513979
- TI Apple Polyphenols and Products Formed in the Gut Differently Inhibit Survival of Human Cell Lines Derived from Colon Adenoma (LT97) and Carcinoma (HT29)
- AU Veeriah, Selvaraju; Hofmann, Thomas; Glei, Michael; Dietrich, Helmut; Will, Frank; Schreier, Peter; Knaup, Bastian; Pool-Zobel, Beatrice Louise
- CS Department of Nutritional Toxicology, Institute for Nutrition, Friedrich-Schiller-University, Jena, D-07743, Germany
- SO Journal of Agricultural and Food Chemistry (2007), 55(8), 2892-2900 CODEN: JAFCAU; ISSN: 0021-8561
- PB American Chemical Society
- DT Journal
- LA English

of

- AB Colorectal tumor risks could be reduced by polyphenol-rich diets that inhibit cell growth. Here, apple polyphenols were studied for effects on the survival of colon adenoma (LT97) and carcinoma-derived (HT29) cell lines. Three apple exts. (AEs) from harvest years 2002-2004 were isolated (AE02, AE03, and AE04) and fermented in vitro with human fecal flora. Exts. and fermentation products were analyzed for polyphenols
- with HPLC. The cells were treated with AEs (0-850 $\mu g/mL$) or fermented AEs (F-AEs, 0-9%), and survival was measured by DNA staining. All AEs contained high amts. of polyphenols (311-534 mg/g) and reduced cell survival (in LT97 > HT29). AE03 was most potent, possibly because it contained more quercetin compds. Fermentation of AEs resulted in an increase
 - short chain fatty acids, and polyphenols were degraded. The F-AEs were .apprx.3-fold less bioactive than the corresponding AEs, pointing to a loss of chemoprotective properties through fermentation
- RE.CNT 48 THERE ARE 48 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L13 ANSWER 3 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN DUPLICATE 1
- AN 2006:256838 CAPLUS
- DN 145:241079
- TI Apple flavonoids inhibit growth of HT29 human colon cancer cells and modulate expression of genes involved in the biotransformation of xenobiotics
- AU Veeriah, Selvaraju; Kautenburger, Tanja; Habermann, Nina; Sauer, Julia; Dietrich, Helmut; Will, Frank; Pool-Zobel, Beatrice Louise
- CS Department of Nutritional Toxicology, Institute for Nutrition, Friedrich-Schiller-University, Jena, Germany
- SO Molecular Carcinogenesis (2006), 45(3), 164-174 CODEN: MOCAE8; ISSN: 0899-1987
- PB Wiley-Liss, Inc.
- DT Journal
- LA English
- AB Flavonoids from fruits and vegetables probably reduce risks of diseases associated with oxidative stress, including cancer. Apples contain significant amts. of flavonoids with antioxidative potential. The objectives of this study were to investigate such compds. for properties associated with reduction of cancer risks. We report herein that apple flavonoids from an apple extract (AE) inhibit colon cancer cell growth and significantly modulate expression of genes related to xenobiotic metabolism HT29 cells were treated with AE at concns. delivering 5-50 μM of one of the major ingredients, phloridzin ("phloridzin-equivalent," Ph.E), to the cell culture medium, with a synthetic flavonoid mixture mimicking the composition of the AE or with 5-100 μM individual flavonoids. HT29 cell growth was inhibited by the complex extract and by the mixture HT29 cells were treated

with nontoxic doses of the AE (30 $\mu\text{M}, \text{Ph.E})$ and after 24 h total RNA was isolated to elucidate patterns of gene expression using a human cDNA-microarray (SuperArray) spotted with 96 genes of drug metabolism Treatment with AE resulted in an upregulation of several genes (GSTP1, GSTT2, MGST2, CYP4F3, CHST5, CHST6, and CHST7) and downregulation of EPHX1, in comparison to the medium controls. The enhanced transcriptional activity of GSTP1 and GSTT2 genes was confirmed with real-time qRT-PCR. On the basis of the pattern of differential gene expression found here, we conclude that apple flavonoids modulate toxicol. defense against colon cancer risk factors. In addition to the inhibition of tumor cell proliferation, this could be a mechanism of cancer risk reduction

RE.CNT 55 THERE ARE 55 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L13 ANSWER 4 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN
- AN 2005:457191 CAPLUS
- DN 144:68997
- TI Inhibitors of the epidermal growth factor receptor in apple juice extract
- AU Kern, Melanie; Tjaden, Zeina; Ngiewih, Yufanyi; Puppel, Nicole; Will, Frank; Dietrich, Helmut; Pahlke, Gudrun; Marko, Doris
- CS Department of Chemistry, Division of Food Chemistry and Environmental Toxicology, University of Kaiserslautern, Kaiserslautern, Germany
- SO Molecular Nutrition & Food Research (2005), 49(4), 317-328 CODEN: MNFRCV; ISSN: 1613-4125
- PB Wiley-VCH Verlag GmbH & Co. KGaA
- DT Journal
- LA English
- The polyphenol-rich extract of a consumer-relevant apple juice blend was found to potently inhibit the growth of the human colon cancer cell line HT29 in vitro. The epidermal growth factor receptor (EGFR) and its subsequent signaling cascade play an important role in the regulation of cell proliferation in HT29 cells. The protein tyrosine kinase activity of an EGFR preparation was effectively inhibited by the polyphenol-rich apple juice extract Treatment of intact cells with this extract resulted in the suppression of the subsequent mitogen-activated protein kinase cascade. Amongst the so far identified apple juice constituents, the proanthocyanidins B1 and B2 as well as quercetin-3-glc (isoquercitrin) and quercetin-3-gal (hyperoside) were found to possess substantial EGFR-inhibitory properties. However, as to be expected from the final concentration of these potential EGFR inhibitors in the original

extract, a synthetic mixture of the apple juice constituents identified and available so far, including both proanthocyanidins and the quercetin glycosides, showed only marginal inhibitory effects on the EGFR. These results permit the assumption that yet unknown constituents contribute substantially to the potent EGFR-inhibitory properties of polyphenol-rich apple juice extract In summary, the polyphenol composition of apple juice possesses promising growth-inhibitory properties, affecting proliferation-associated signaling cascades in colon tumor cells.

RE.CNT 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L13 ANSWER 5 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN DUPLICATE 2
- AN 2004:780424 CAPLUS
- DN 141:266084

polyphenol-rich

- TI Extracorporeal blood treatment system using ultraviolet light and filters
- IN Mallett, Scott R.; Davidner, Alan A.; Walker, Kimberly A.
- PA USA
- SO U.S. Pat. Appl. Publ., 29 pp. CODEN: USXXCO
- DT Patent
- LA English

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FAN.CNT 9
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PATENT NO.
                KIND DATE APPLICATION NO. DATE
                      A1 20040923 US 2003-391453 20030317
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    _____
    US 20040186412
PΤ
    WO 2004082737
                      A2 20040930 WO 2004-US7590
                                                             20040312
    WO 2004082737
                      A3 20050512
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
            CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
            GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
            LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA
        RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
            BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,
            ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
            SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN,
            TD, TG
    US 20060210424
                      A1
                             20060921
                                        US 2006-417717
                                                             20060503
                      A
PRAI US 2003-390558
                            20030317
    US 2003-390565
                      A
                            20030317
                     A
A
    US 2003-390572
                            20030317
    US 2003-391443
                            20030317
                      A
    US 2003-391444
                             20030317
    US 2003-391445
                            20030317
                       A
                           20030317
20030317
20030317
    US 2003-391453
US 2003-391454
US 2003-391455
                      A
                      A
A
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AΒ A method and apparatus for preventing and treating septicemia in patient blood is provided. The extracorporeal system includes an antimicrobial device to inactivate at least 99% of blood-borne microorganisms, a hemoconcentrator/filtration unit to remove approx. 50-75% of target mols. from the patient blood and a filter unit to remove target mols. from patient blood from the sieved plasma filtrate. Target mols. are produced by microorganisms, as well as by the patient's cells. These mols. include endotoxins from Gram neg. bacteria, exotoxins from Gram neg. and Gram pos. bacteria, as well as RAP protein mediator from Staphylococcus aureus , and cell mediators such as tumor necrosis factor-alpha, and interleukin 1-beta, interleukin 6, complement proteins C3a and C5a, and bradykinin. Over one thousand in vitro expts. were conducted using several embodiments of the present invention. Factors investigated included appropriate UV transparent material, hematocrit of blood for optimal UV absorption, ideal blood flow path for adequate UV exposure, ideal UV dosage, ideal pore size of hemofilters, ideal surface area of hemofilters, ideal blood model, development of porcine cytokine assays, various circuit coatings and optimal flow rates.

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L13 ANSWER 6 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN DUPLICATE 3
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FAN.CNT 9

| | PA: | FENT : | NO. | | | KIN | D | DATE | | | APPL | ICAT | I NOI | NO. | | D. | ATE | |
|----|-----|--------|-------|-----|-----|-----|-----|------|------|-----|------|-------|-------|-----|-----|-----|------|-----|
| | | | | | | | _ | | | | | | | | | | | |
| PΙ | US | 2004 | 0186 | 411 | | A1 | | 2004 | 0923 | | US 2 | 003- | 3905 | 72 | | 2 | 0030 | 317 |
| | US | 7229 | 427 | | | В2 | | 2007 | 0612 | | | | | | | | | |
| | WO | 2004 | 0827 | 37 | | A2 | | 2004 | 0930 | | WO 2 | 004-1 | US759 | 90 | | 2 | 0040 | 312 |
| | WO | 2004 | 0827. | 37 | | A3 | | 2005 | 0512 | | | | | | | | | |
| | | W: | ΑE, | AG, | ΑL, | ΑM, | ΑT, | ΑU, | ΑZ, | BΑ, | BB, | BG, | BR, | BW, | BY, | BZ, | CA, | CH, |

AN 2004:780423 CAPLUS

DN 141:266083

TI Irradiation and filter device for treatment of blood

IN Mallett, Scott R.; Davidner, Alan A.; Walker, Kimberly A.

PA Hemavation, USA

SO U.S. Pat. Appl. Publ., 29 pp.

CODEN: USXXCO

DT Patent

LA English

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CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
             LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA
         RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
             BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,
             ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
             SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN,
             TD, TG
PRAI US 2003-390558
                                20030317
                          Α
     US 2003-390565
                                20030317
                         Α
     US 2003-390572
                                20030317
                          Α
     US 2003-391443
                          Α
                                20030317
     US 2003-391444
                         Α
                                20030317
     US 2003-391445
                         Α
                                20030317
     US 2003-391453
                                20030317
                          Α
     US 2003-391454
                                20030317
                          Α
     US 2003-391455
                                20030317
                          Α
AB
     A method and apparatus for preventing and treating septicemia in patient blood
     is provided. The extracorporeal system includes an antimicrobial device
     to inactivate at least 99% of blood-borne microorganisms, a
     hemoconcentrator/filtration unit to remove approx. 50-75% of target mols.
     from the patient blood and a filter unit to remove target mols. from
     patient blood from the sieved plasma filtrate. Target mols. are produced
     by microorganisms, as well as by the patient's cells. These mols. include
     endotoxins from Gram neg. bacteria, exotoxins from Gram neg. and Gram pos.
     bacteria, as well as RAP protein mediator from Staphylococcus aureus , and
     cell mediators such as tumor necrosis factor-alpha, and
     interleukin 1-beta, interleukin 6, complement proteins C3a and C5a, and
     bradykinin. Over one thousand in vitro expts. were conducted using
     several embodiments of the present invention. Factors investigated
     included appropriate UV transparent material, hematocrit of blood for
     optimal UV absorption, ideal blood flow path for adequate UV exposure,
     ideal UV dosage, ideal pore size of hemofilters, ideal surface area of
     hemofilters, ideal blood model, development of porcine cytokine assays,
     various circuit coatings and optimal flow rates.
RE.CNT 44
              THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT
L13
    ANSWER 7 OF 9 USPATFULL on STN
       2004:69647 USPATFULL
AN
       Synergistic composition for treating leukemia
ΤI
IN
       Bandyopadhyay, Santu, Kolkata, INDIA
       Chandra Pal, Bikash, Kolkata, INDIA
       Bhattacharya, Samir, Kolkata, INDIA
       Roy, Keshab Chandra, Kolkata, INDIA
       Bandyopadhyay, Gautam, Kolkata, INDIA
PΑ
       Council Of Scientific & Industrial Research, New Delhi, INDIA, 110 001
       (non-U.S. corporation)
PΙ
       US 2004052874
                               20040318
                           A1
                           A1
AΙ
       US 2003-613122
                               20030707 (10)
       US 2002-393750P
                           20020708 (60)
PRAI
DT
       Utility
FS
       APPLICATION
       FITZPATRICK CELLA HARPER & SCINTO, 30 ROCKEFELLER PLAZA, NEW YORK, NY,
       10112
       Number of Claims: 18
CLMN
ECL
       Exemplary Claim: 1
DRWN
       5 Drawing Page(s)
LN.CNT 685
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB
       The present invention provides a method of treating acute and chronic
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myeloid leukemia (AML & CML) and lymphoid leukemia, said method

comprising administering a pharmaceutical composition comprising pharmaceutically effective amount of chlorogenic acid (CA) and 3-o-p-Coumaryl quinic acid (PCQ) isolated from any plant parts of Piper betel or any other source, both individually or in a synergistic combination optionally along with pharmaceutically acceptable additives

betel or any other source, both individually or in a synergistic combination optionally along with pharmaceutically acceptable additives.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

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L13 ANSWER 8 OF 9 USPATFULL on STN
       2004:7898 USPATFULL
AN
       Pharmaceutical composition useful for treating chronic myeloid leukemia
TΙ
IN
       Bandyopadhyay, Santu, Kolkata, INDIA
       Pal, Bikas Chandra, Kolkata, INDIA
       Bhattacharyay, Samir, Kolkata, INDIA
       Mondal, Swapan, Calcutta, INDIA
       Mandal, Chhabinath, Calcutta, INDIA
       Konar, Aditya, Calcutta, INDIA
       Roy, Keshab Chandra, Calcutta, INDIA
       Biswas, Tanusree, Calcutta, INDIA
       Bandyopadhyay, Gautam, Calcutta, INDIA
       COUNCIL OF SCIENTIFIC (non-U.S. corporation)
PA
       INDUSTRIAL RESEARCH (non-U.S. corporation)
PΙ
       US 2004006138
                           A1 20040108
                           A1
ΑI
       US 2003-338689
                               20030109 (10)
PRAI
       US 2002-393750P
                           20020708 (60)
DT
       Utility
FS
       APPLICATION
LREP
       FITZPATRICK CELLA HARPER & SCINTO, 30 ROCKEFELLER PLAZA, NEW YORK, NY,
       10112
CLMN
       Number of Claims: 37
ECL
       Exemplary Claim: 1
DRWN
       8 Drawing Page(s)
LN.CNT 591
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       The present invention relates to a pharmaceutical composition useful for
AB
       treating chronic myeloid leukemia where Bcr-Abl kinase is constitutively
       expressed in animals and humans, said composition comprising an
       effective amount of analogs of chlorogenic acid such as neochlorogenic
       acid (5-0-caffeoyl quinic acid), cryptochlorogenic acid (4-0-Caffeoyl
       quinic acid), 3-0-(3'-methylcaffeoyl) quinic acid and
       5-O-(Caffeoyl-4'-methyl) quinic acid and/or its salts such as sodium,
       potassium and ammonium together with pharmaceutically acceptable
       additives.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
L13 ANSWER 9 OF 9 USPATFULL on STN
       2003:325158 USPATFULL
ΑN
TΙ
       Herbal molecule as potential anti-leukemic drug
TN
       Bandyopadhyay, Santu, Calcutta, INDIA
       Pal, Bikash Chandra, Kolkata, INDIA
       Bhattacharya, Samir, Kolkata, INDIA
       Roy, Keshab Chandra, Kolkata, INDIA
       Bandyopadhyay, Gautam, Kolkata, INDIA
                           A1 20031211
A1 20030109 (10)
PΙ
       US 2003229140
AΙ
       US 2003-338688
PRAI
       WO 2002-IB5565
                           20021220
       US 2002-384163P
                           20020531 (60)
       US 2002-393750P
                           20020708 (60)
       Utility
DT
FS
       APPLICATION
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FITZPATRICK CELLA HARPER & SCINTO, 30 ROCKEFELLER PLAZA, NEW YORK, NY,

LREP

10112

CLMN Number of Claims: 49 ECL Exemplary Claim: 1 DRWN 3 Drawing Page(s)

LN.CNT 676

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention relates to a new use of the compound chlorogenic acid isolated from the piper betel leaf extract or from any other sources for the treatment of acute and chronic myeloid leukemia and lymphoid leukemia, and the present invention also provides a pharmaceutical composition comprising chloregenic acid along with pharmaceutically acceptable additive for the treatment of acute and chronic myeloid leukemia and lymphoid leukemia.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=>

---Logging off of STN---

=>

Executing the logoff script...

=> LOG Y

| COST IN U.S. DOLLARS | SINCE FILE | TOTAL |
|--|------------|---------|
| | ENTRY | SESSION |
| FULL ESTIMATED COST | 159.45 | 181.41 |
| | | |
| DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) | SINCE FILE | TOTAL |
| | ENTRY | SESSION |
| CA SUBSCRIBER PRICE | -11.20 | -11.20 |
| | | |

STN INTERNATIONAL LOGOFF AT 16:56:39 ON 10 APR 2008